

**What Is Claimed Is:**

- 1           1.     A method for dynamic gamma adjustment of an LCD having  
2     a data driver and a gate driver, comprising the following steps:  
3         detecting a brightness data of a data signal provided by  
4         the data driver; and  
5         providing a gamma signal according to the brightness data  
6         to the data driver.
- 1           2.     The method as claimed in claim 1, wherein the  
2     brightness data represents a gray-level distribution of a single  
3     frame.
- 1           3.     The method as claimed in claim 1, wherein the  
2     brightness data represents an average gray-level distribution  
3     of a plurality of frames.
- 1           4.     The method as claimed in claim 1, wherein the gamma  
2     signal enhances the brightness resolution of a low gray level  
3     when the brightness data belongs to a low gray level.
- 1           5.     The method as claimed in claim 1, wherein the gamma  
2     signal enhances the brightness resolution of a high gray level  
3     when the brightness data belongs to a high gray level.
- 1           6.     The method as claimed in claim 1, wherein the gamma  
2     signal adjusts a voltage level of the data signal presenting a  
3     predetermined gray level.
- 1           7.     The method as claimed in claim 1, wherein the data  
2     signal is a digital signal.

1           8.    A circuit for dynamic gamma adjustment of an LCD  
2   having a data driver and a gate driver, comprising:  
3           a brightness sampling circuit for detecting a brightness  
4           data of a data signal provided by the data driver;  
5           a brightness classifying circuit for classifying the  
6           brightness data into a predetermined brightness  
7           group; and  
8           a gamma decision circuit for providing a predetermined  
9           gamma signal of the predetermined brightness group  
10          to the data driver.

1           9.    The circuit as claimed in claim 8, wherein the data  
2   signal is a digital signal.

1           10.   The circuit as claimed in claim 9, wherein the  
2   brightness sampling circuit obtains the brightness data by  
3   analyzing the digital signal.

1           11.   The circuit as claimed in claim 8, wherein the  
2   brightness data represents a gray-level distribution of a single  
3   frame.

1           12.   The circuit as claimed in claim 8, wherein the  
2   brightness data represents an average gray-level distribution  
3   of a plurality of frames.

1           13.   The circuit as claimed in claim 8, wherein the gamma  
2   signal output by the gamma decision circuit enhances the  
3   brightness resolution of a low gray level when the brightness  
4   data belongs to a low gray level.

1           14. The circuit as claimed in claim 8, wherein the gamma  
2 signal output by the gamma decision circuit enhances the  
3 brightness resolution of a high gray level when the brightness  
4 data belongs to a high gray level.

1           15. The circuit as claimed in claim 8, wherein the gamma  
2 signal output by the gamma decision circuit adjusts a voltage  
3 level of the data signal presenting a predetermined gray level.